

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:  
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## PCT

### NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of Mailing  
(day/month/year)

**23 AUG 2004**

Applicant's or agent's file reference

19502-2PCT

#### IMPORTANT NOTIFICATION

International application No.

PCT/US02/24525

International filing date (day/month/year)

02 August 2002 (02.08.2002)

Priority date (day/month/year)

02 August 2001 (02.08.2001)

Applicant

PHAGIA-GEL TECHNOLOGIES, LLC

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US

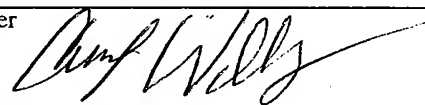
Mail Stop PCT, Attn: IPEA/US  
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P.O. Box 1450  
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ENTERED

Date: 9/3/04

By: 7MCC

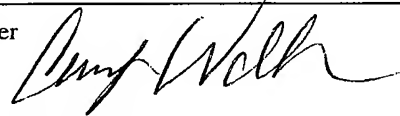
**19502-2**

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 19502-2PCT	<div style="display: flex; justify-content: space-between;"> <div> <b>FOR FURTHER ACTION</b> </div> <div>           See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)         </div> </div>	
International application No. PCT/US02/24525	International filing date ( <i>day/month/year</i> ) 02 August 2002 (02.08.2002)	Priority date ( <i>day/month/year</i> ) 08 February 2001 (08.02.2001)
International Patent Classification (IPC) or national classification and IPC IPC(7): A23L 1/05 and US Cl.: 426/573,578,575, 661		
Applicant PHAGIA-GEL TECHNOLOGIES, LLC		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>—</u> sheets.</p> <p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I <input checked="" type="checkbox"/> Basis of the report</li> <li>II <input type="checkbox"/> Priority</li> <li>III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</li> <li>IV <input type="checkbox"/> Lack of unity of invention</li> <li>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI <input type="checkbox"/> Certain documents cited</li> <li>VII <input type="checkbox"/> Certain defects in the international application</li> <li>VIII <input type="checkbox"/> Certain observations on the international application</li> </ul>		
Date of submission of the demand 14 January 2003 (14.01.2003)	Date of completion of this report 02 August 2004 (02.08.2004)	
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer N. Bhat  Telephone No. 571-272-0987	

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US02/24525

## I. Basis of the report

1. With regard to the **elements** of the international application:\*

- ☒ the international application as originally filed.
- ☒ the description:  
pages 1-21 as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_.
- ☒ the claims:  
pages 22-30, as originally filed  
pages NONE, as amended (together with any statement) under Article 19  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_.
- ☒ the drawings:  
pages 1-2, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_.
- ☐ the sequence listing part of the description:  
pages NONE, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_.

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.  
These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/US02/24525**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims	<u>Please See Continuation Sheet</u>	YES
	Claims	<u>Please See Continuation Sheet</u>	NO
Inventive Step (IS)	Claims	<u>Please See Continuation Sheet</u>	YES
	Claims	<u>Please See Continuation Sheet</u>	NO
Industrial Applicability (IA)	Claims	<u>Please See Continuation Sheet</u>	YES
	Claims	<u>Please See Continuation Sheet</u>	NO

**2. CITATIONS AND EXPLANATIONS**

Please See Continuation Sheet

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/US02/24525

## Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

### V.1. Reasoned Statements:

The opinion as to Novelty was positive (Yes) with respect to claims 6, 16, 23, 26-27, 32-34, 43-48, 51-55  
The opinion as to Novelty was negative (No) with respect to claims 1-5, 7-15, 17-22, 24-25, 28-31, 35-42, 49, 50, 56-83  
The opinion as to Inventive Step was positive (Yes) with respect to claims NONE  
The opinion as to Inventive Step was negative (NO) with respect to claims 1-83  
The opinion as to Industrial Applicability was positive (YES) with respect to claims 1-83  
The opinion as to Industrial Applicability was negative (NO) with respect to claims NONE

Claims 1, 2, 7-12, 17, 24-25, 28-31, 35, 36, 42, 49, 50, 56, 64, 70 and 71 lack novelty under PCT Article 33(2) as being anticipated by Sheldon.

Sheldon teaches a thickened hydrolyte isotonic beverage wherein the beverage is thickened with a composition, which comprises water, carbohydrate, a modified food starch and various electrolytes and other minor ingredients. The beverage made as described by Sheldon is useful for persons having dysphagia or difficulty in swallowing. The beverage as provided includes providing a base, which includes a number of dry ingredients, which is then mixed with water, and then a base, which contains the modified food starch, which is used as the thickening agent for the beverage. The beverage is made from a dry concentrate of ingredients, which is admixed with water or can be diluted. Sheldon specifically teaches that the viscosity of the beverage can be controlled depending upon the application. [Note Column 2, lines 40-54] Although, Sheldon doesn't specifically make an aqueous thickening concentrate which is then added to a liquid the steps taught in Sheldon does provide making different bases and each base is admixed to provide a thickened hydrolyte isotonic beverage thus anticipating applicant's invention.

Claims 1- 5, 7-15, 17-22, 35-41 and 56-83 lack novelty under PCT Article 33(2) as being anticipated by Lee.

Lee teaches concentrated xanthan gum solution which can be admixed with other liquids as a thickener which can be used in foodstuff, cosmetics and pharmaceuticals applications. The aqueous concentrate includes xanthan gum as the thickening agent. The amount of xanthan gum used in the concentrated xanthan gum solution is within the range as taught by applicant. The xanthan gum solution can be stored and transported and has high clarity making it permissible to add to a beverage without clouding, the xanthan gum has high viscosity in dilute form. The concentrated xanthan gum is readily amendable to dilution with water and very effective as a thickening agent. [Note Column 6, lines 33-67 and Column 7, lines 27-40]

Claims 1-83 lacks an inventive step under PCT Article 33(3) as being obvious over Lee in view of Sheldon.

Lee teaches the invention substantially as claimed and teaches a process of making and aqueous xanthan gum concentrate which is readily amenable for dilution with other liquids as a thickener which can be used in foodstuff, cosmetics and pharmaceuticals applications. The aqueous concentrate includes xanthan gum as the thickening agent. The amount of xanthan gum used in the concentrated xanthan gum solution is within the range as taught by applicant. The xanthan gum solution can be stored and transported and has high clarity making it permissible to add to a beverage without clouding, the xanthan gum has high viscosity in dilute form.

However, Lee does not teach specifically using the xanthan gum concentrate in specifically thickening beverages and specific beverages such as breast milk as claimed by applicant or that the thickened beverage is used in various medical treatments or for people suffering from dysphagia.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
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**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Sheldon teaches providing a thickened isotonic beverage thickened with a modified starch for persons suffering from dysphagia. The beverage as described by Sheldon is intended for hydration therapy. Lee teaches generically using a xanthan gum concentrate in aqueous solution to thicken the food or beverage, cosmetic or pharmaceutical teaching that the xanthan gum concentrate can be used as thickener in a number of applications thus to provide the xanthan gum concentrate in a beverage which can be used for various medical procedures or for dysphagia or can be added to soups, fluids, breast milk etc. would have been obvious to one having ordinary skill in the art.

Claims 1-83 meet the criteria set out in PCT Article 33(4) and thus has industrial applicability because the subject matter claimed can be made or used in industry.

----- NEW CITATIONS -----